Flex static code analysis

Unique rules to find Bugs, Security Hotspots, and Code Smells in your FLEX code

1.	
	Security.allowDomain() should only be used in a tightly focused manner Vulnerability
2.	
	The flash.system.Security.exactSettings property should never be set to false Vulnerability
3.	
	Dynamic classes should not be used Code Smell
4.	
	"LocalConnection" should be configured to narrowly specify the domains with which local connections to other Flex application are allowed <u>Vulnerability</u>
5.	
	"default" clauses should be first or last Code Smell
6.	
	Event types should be defined in metadata tags <u>Code Smell</u>
7.	
	Event names should not be hardcoded in event listeners <u>Code Smell</u>
8.	
	The special "star" type should not be used Code Smell
9.	
	Variables of the "Object" type should not be used Code Smell
10.	
	Methods should not be empty Code Smell
11.	
	Constant names should comply with a naming convention <u>Code Smell</u>
12.	
	All branches in a conditional structure should not have exactly the same implementation Bug
13.	
	Classes that extend "Event" should override "Event.clone()" Bug
14.	
	Constructors should not dispatch events
	Bug
15.	
	"ManagedEvents" tags should have companion "Event" tags Bug

16.	16.		
	Objects should not be instantiated inside a loop <u>Code Smell</u>		
17.			
	Two branches in a conditional structure should not have exactly the same implementation <u>Code Smell</u>		
18.			
	Constructor bodies should be as lightweight as possible Code Smell		
19.			
	Only "while", "do" and "for" statements should be labelled Code Smell		
20.			
	Statements, operators and keywords specific to ActionScript 2 should not be used Code Smell		
21.			
	"for" loop stop conditions should be invariant Code Smell		
22.			
	Unused function parameters should be removed Code Smell		
23.			
	Unused "private" functions should be removed <u>Code Smell</u>		
24.			
	Local variables should not shadow class fields Code Smell		
25.			
	Nested blocks of code should not be left empty <u>Code Smell</u>		
26.			
	Functions should not have too many parameters <u>Code Smell</u>		
27.			
	Unused "private" fields should be removed Code Smell		
28.			
	Collapsible "if" statements should be merged Code Smell		
29.			
	Delivering code in production with debug features activated is security-sensitive Security Hotspot		
30.			
	Unused local variables should be removed Code Smell		
31.			
	Package definition should be separate from Class definition <u>Code Smell</u>		
32.			
	Constructors should not have a "void" return type		

"public static" fields should be constant Code Smell "switch" statements should have at least 3 "case" clauses Code Smell "switch" statements should have at least 3 "case" clauses Code Smell "Package names should comply with a naming convention Code Smell 36.		Code Smell
Code Smell 34.	33.	·
"switch" statements should have at least 3 "case" clauses Code Smell 35. Package names should comply with a naming convention Code Smell 36. Overriding methods should do more than simply call the same method in the super class Code Smell 37. Public constants and fields initialized at declaration should be "const static" rather than merely "const" Code Smell 38. Local variable and function parameter names should comply with a naming convention Code Smell 39. Field names should comply with a naming convention Code Smell 40. Boolean literals should not be redundant Code Smell 41. Empty statements should be removed Code Smell 42. Class names should comply with a naming convention Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell 8 "switch" statements should not be nested Code Smell 8 "switch" statements should not be nested Code Smell		
Scode Smell	34.	
Package names should comply with a naming convention Code Smell 36. Overriding methods should do more than simply call the same method in the super class Code Smell 37. Public constants and fields initialized at declaration should be "const static" rather than merely "const" Code Smell 38. Local variable and function parameter names should comply with a naming convention Code Smell 39. Field names should comply with a naming convention Code Smell 40. Boolean literals should not be redundant Code Smell 41. Empty statements should be removed Code Smell 42. Class names should comply with a naming convention Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell "switch" statements should not be nested Code Smell		
Code Smell 36. Overriding methods should do more than simply call the same method in the super class Code Smell 37. Public constants and fields initialized at declaration should be "const static" rather than merely "const" Code Smell 38. Local variable and function parameter names should comply with a naming convention Code Smell 39. Field names should comply with a naming convention Code Smell 40. Boolean literals should not be redundant Code Smell 41. Empty statements should be removed Code Smell 42. Class names should comply with a naming convention Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell 5. "switch" statements should not be nested Code Smell 5. "switch" statements should not be nested Code Smell 5. "switch" statements should not be nested Code Smell 5. "switch" statements should not be nested Code Smell 5. "switch" statements should not be nested Code Smell 5. "switch" statements should not be nested Code Smell 5. "switch" statements should not be nested Code Smell 5. "switch" statements should not be nested Code Smell 5. "switch" statements should not be nested Code Smell 5. Track lack of copyright and license Code Smell 5. "switch" statements should not be nested Code Smell 5. "switch" statements should not be nested Code Smell 5. Track lack of Code Smell	35.	
Overriding methods should do more than simply call the same method in the super class Code Smell 37. Public constants and fields initialized at declaration should be "const static" rather than merely "const" Code Smell 38. Local variable and function parameter names should comply with a naming convention Code Smell 39. Field names should comply with a naming convention Code Smell 40. Boolean literals should not be redundant Code Smell 41. Empty statements should be removed Code Smell 42. Class names should comply with a naming convention Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell		
Code Smell 37.	36.	
Public constants and fields initialized at declaration should be "const static" rather than merely "const" Code Smell 38. Local variable and function parameter names should comply with a naming convention Code Smell 39. Field names should comply with a naming convention Code Smell 40. Boolean literals should not be redundant Code Smell 41. Empty statements should be removed Code Smell 42. Class names should comply with a naming convention Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell		
merely "const" Code Smell 38. Local variable and function parameter names should comply with a naming convention Code Smell 39. Field names should comply with a naming convention Code Smell 40. Boolean literals should not be redundant Code Smell 41. Empty statements should be removed Code Smell 42. Class names should comply with a naming convention Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell	37.	
Local variable and function parameter names should comply with a naming convention Code Smell 39. Field names should comply with a naming convention Code Smell 40. Boolean literals should not be redundant Code Smell 41. Empty statements should be removed Code Smell 42. Class names should comply with a naming convention Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell		merely "const"
Code Smell 39. Field names should comply with a naming convention Code Smell 40. Boolean literals should not be redundant Code Smell 41. Empty statements should be removed Code Smell 42. Class names should comply with a naming convention Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell 48. "switch" statements should not be nested Code Smell 48. "switch" statements should not be nested Code Smell 48. "switch" statements should not be nested Code Smell 48. "switch" statements should not be nested Code Smell 48. "switch" statements should not be nested Code Smell 48. "switch" statements should not be nested Code Smell 48. "switch" statements should not be nested Code Smell 48. "switch" statements should not be nested Code Smell 48. The code Smell 48.	38.	
Field names should comply with a naming convention Code Smell 40. Boolean literals should not be redundant Code Smell 41. Empty statements should be removed Code Smell 42. Class names should comply with a naming convention Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell		
Code Smell	39.	
Boolean literals should not be redundant Code Smell 41. Empty statements should be removed Code Smell 42. Class names should comply with a naming convention Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell		
Code Smell 41. Empty statements should be removed Code Smell 42. Class names should comply with a naming convention Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell	40.	
Empty statements should be removed Code Smell 42. Class names should comply with a naming convention Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell		
Code Smell 42.	41.	
Class names should comply with a naming convention Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell		
Code Smell 43. Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell 48. "switch" statements should not be nested Code Smell 48. "switch" statements should not be nested Code Smell 48.	42.	
Function names should comply with a naming convention Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell		
Code Smell 44. The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell	43.	
The element type of an array field should be specified Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell		
Code Smell 45. Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell	44.	
Track lack of copyright and license headers Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell		
Code Smell 46. Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell	45.	
Octal values should not be used Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell		
Code Smell 47. Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell	46.	
Switch cases should end with an unconditional "break" statement Code Smell 48. "switch" statements should not be nested Code Smell		
Code Smell 48. "switch" statements should not be nested Code Smell	47.	
"switch" statements should not be nested <u>Code Smell</u>		
<u>Code Smell</u>	48.	
49.		
	49.	

	Cyclomatic Complexity of functions should not be too high <u>Code Smell</u>
50.	
	Control flow statements "if", "for", "while" and "switch" should not be nested too deeply Code Smell
51.	·————
	Cyclomatic Complexity of classes should not be too high Code Smell
52.	·————
	"switch" statements should have "default" clauses Code Smell
53.	
	Multiple "++" or "" unary operators should not be used in a single arithmetic expression Bug
54.	
	"with" statements should not be used Bug
55.	
	Useless "if(true) {}" and "if(false){}" blocks should be removed Bug
56.	
	Flex parser failure Code Smell
57.	·
	Classes should not have too many fields Code Smell
58.	
	Classes should not have too many methods Code Smell
59.	
	"===" and "!==" should be used instead of "==" and "!=" Code Smell
60.	
	Track breaches of an XPath rule Code Smell
61.	
	Functions should not have too many lines of code Code Smell
62.	
	Sections of code should not be commented out Code Smell
63.	
	Track comments matching a regular expression <u>Code Smell</u>
64.	
	Statements should be on separate lines Code Smell
65.	
	Public classes, methods, properties and metadata should be documented with ASDoc Code Smell
66.	

"switch case" clauses should not have too many lines of code Code Smell
67.
Functions should not contain too many return statements <u>Code Smell</u>
68.
Lines should not be too long Code Smell
69.
The "trace" function should not be used Vulnerability
70.
"Alert.show()" should not be used Vulnerability
71.
Cases in a "switch" should not have the same condition Bug
72.
Method visibility should be explicitly declared Bug
73.
"MovieClip.onEnterFrame" event handler should not be used Code Smell
74.
Statements should end with semicolons <u>Code Smell</u>
75.
Loggers should be "private static const" and should share naming convention Code Smell
76.
A function should have a single point of exit at the end of the function Code Smell